# 4.2.C. 0513010603.

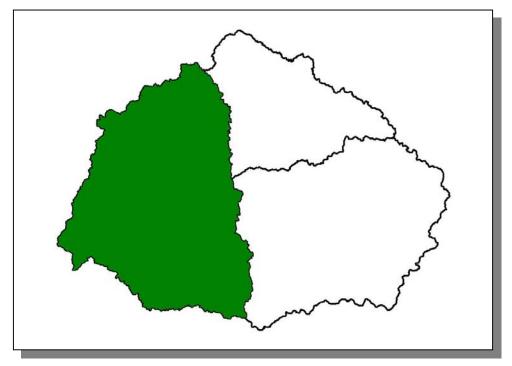


Figure 4-92. Location of Subwatershed 0513010603. All Tennessee Cordell Hull Lake HUC-10 subwatershed boundaries are shown for reference.

# 4.2.C.i. 051301060301 (Cumberland River).

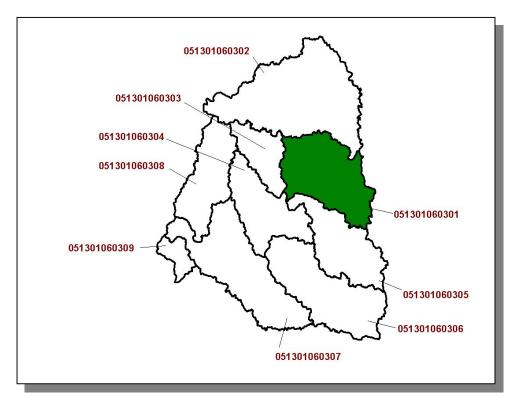


Figure 4-93. Location of Subwatershed 051301060301. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

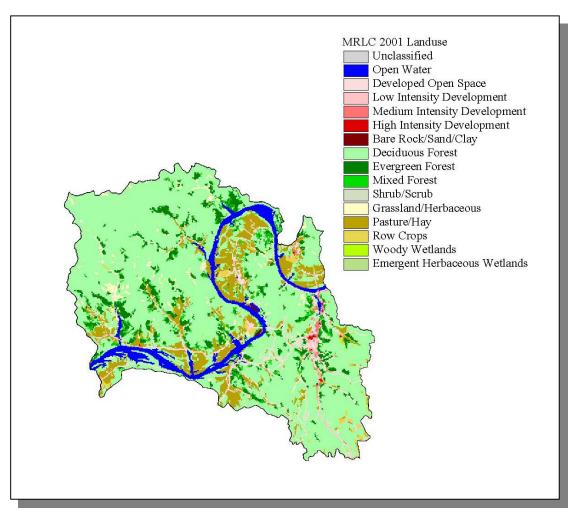


Figure 4-94. Illustration of Land Use Distribution in Subwatershed 051301060301.

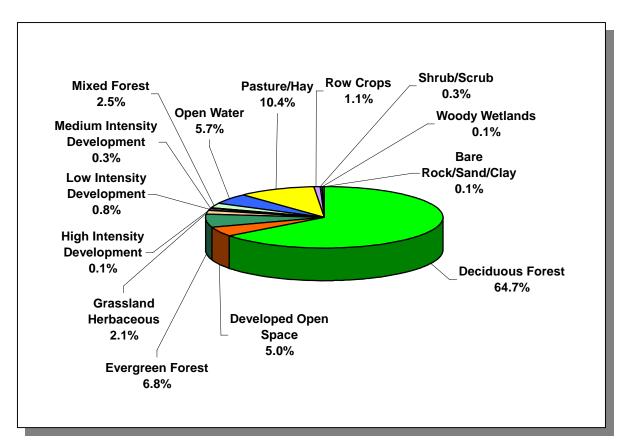


Figure 4-95. Land Use Distribution in Subwatershed 051301060301. More information is provided in Appendix IV.

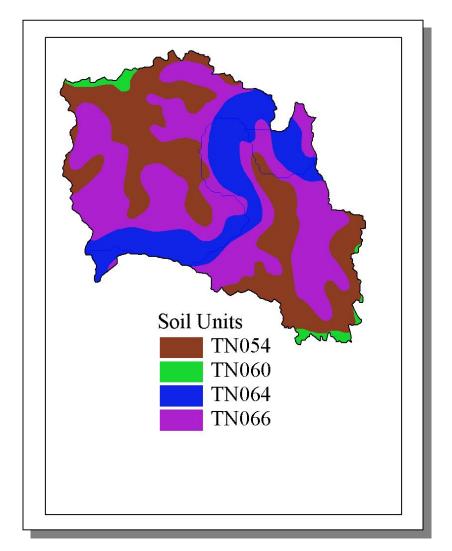


Figure 4-96. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060301.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	pН	SOIL TEXTURE	ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	19.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-71. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060301. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION					IATED PC N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Jackson	9,297	9,537	10,984	13.41	1,247	1,279	1,473	18.1

Table 4-72. Population Estimates in Subwatershed 051301010301.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Gainesboro	Jackson	1,002	495	411	82	2

Table 4-73. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301060301.

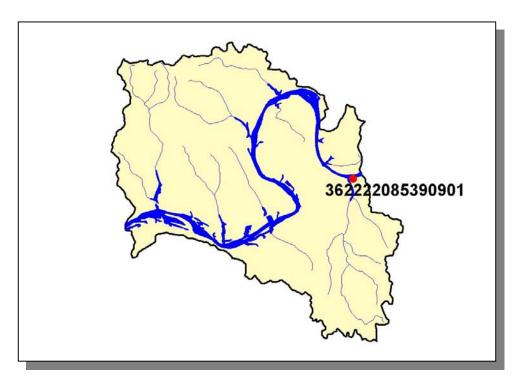


Figure 4-97. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301060301. More information is provided in Appendix IV.

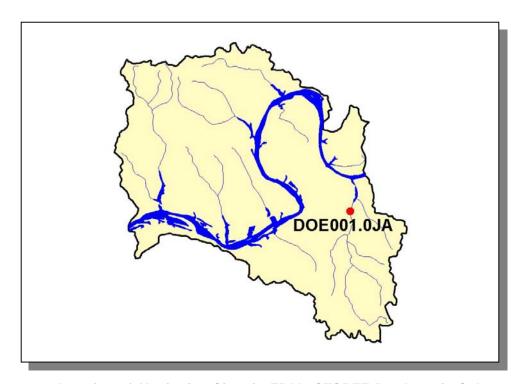


Figure 4-98. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060301. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.i.a. Point Source Contributions.

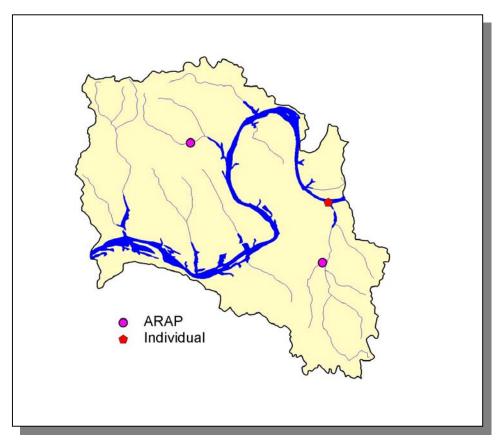


Figure 4-99. Location of Permits Issued in Subwatershed 051301060301. More information, including the names of facilities, is provided in Appendix IV.

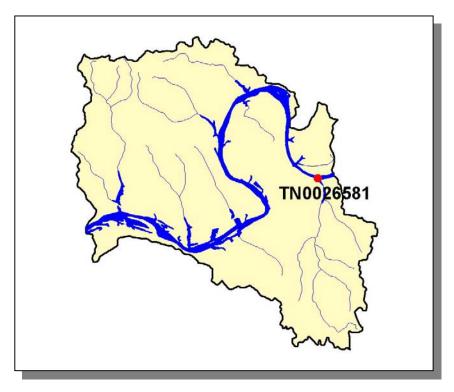


Figure 4-100. Location of Active NPDES Sites in Subwatershed 051301060301. More information, including the names of facilities, is provided in Appendix IV.

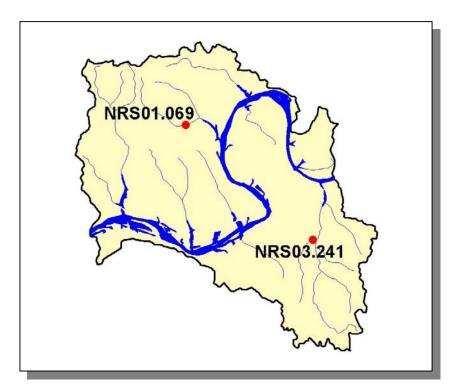


Figure 4-101. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301060301. More information is provided in Appendix IV.

#### 4.2.C.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep		
799	1,386	<5	<5	46	<5		

Table 4-74. Summary of Livestock Count Estimates in Subwatershed 051301060301. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Jackson	6,962	12,086	10	727	403	39

**Table 4-75. Summary of Livestock Count Estimates in Jackson County.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land Timber Land (thousand acres)		Growing Stock Sawtimber (million cubic feet)		
Jackson	135.9	135.9	0.9	5.1	

Table 4-76. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson County.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	2.24
Legumes (Hayland)	0.17
Grass, Forbs, Legumes (Mixed Pasture)	1.99
Corn (Row Crops)	21.43
Farmsteads and Ranch Headquarters	1.31

Table 4-77. Annual Estimated Total Soil Loss in Subwatershed 051301060301.

# 4.2.C.ii. 051301060302 (Jennings Creek).

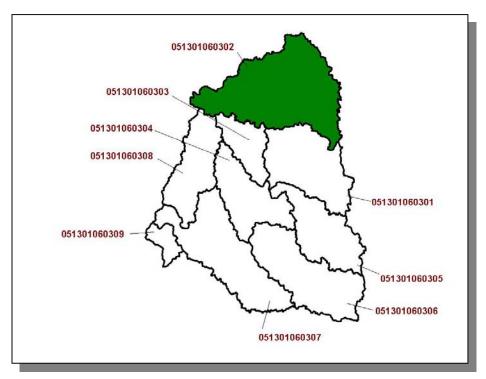


Figure 4-102. Location of Subwatershed 051301060302. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

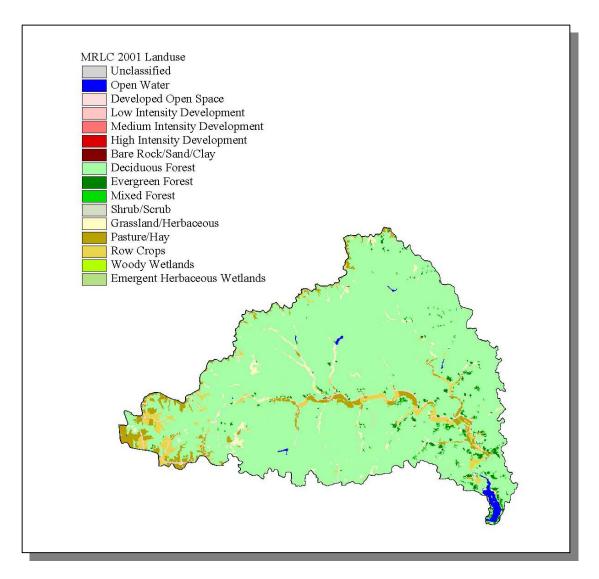


Figure 4-103. Illustration of Land Use Distribution in Subwatershed 051301060302.

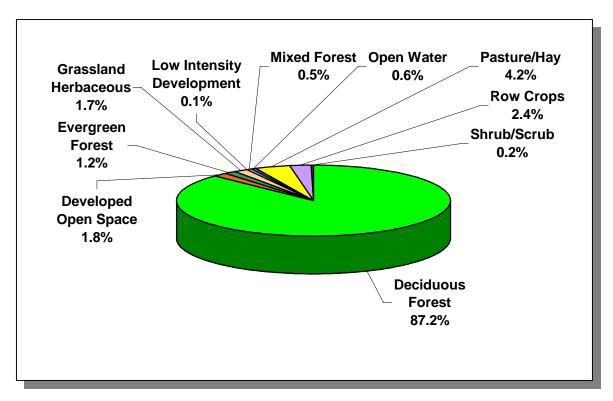


Figure 4-104. Land Use Distribution in Subwatershed 051301060302. More information is provided in Appendix IV.

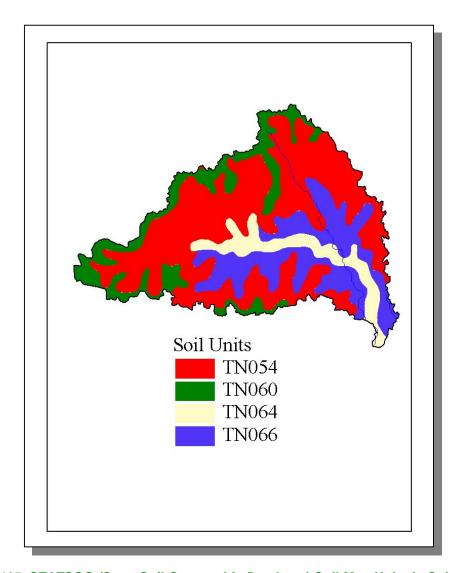


Figure 4-105. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-78. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060302. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Clay	7,238	7,311	7,976	3.74	271	274	298	10.0
Jackson	9,297	9,537	10,984	16.57	1,540	1,580	1,820	18.2
Macon	15,906	17,854	20,386	3.77	600	673	769	28.2
Total	32,441	34,702	39,346		2,411	2,527	2,887	19.7

Table 4-79. Population Estimates in Subwatershed 051301010302.



Figure 4-106. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060302. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.ii.a. Point Source Contributions.

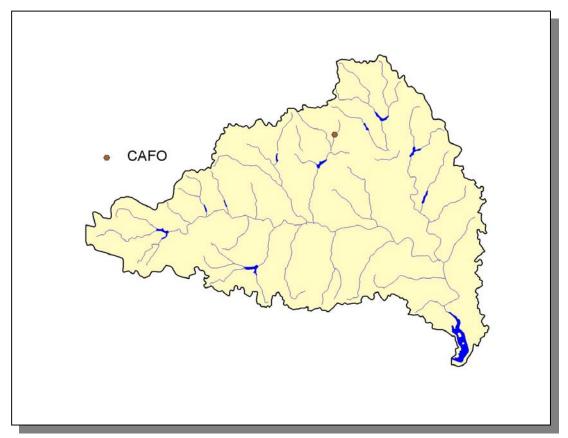


Figure 4-107. Location of Permits Issued in Subwatershed 051301060302. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-108. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051301060302. More information, including the names of facilities, is provided in Appendix IV.

### 4.2.C.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS							
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep		
871	1,652	11	<5	101	6		

Table 4-80. Summary of Livestock Count Estimates in Subwatershed 051301060302. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
Clay	0	14,574	0	18	174	23	
Jackson	6,962	12,086	10	727	403	39	
Macon	15,039	26,098	318	675	2,377	111	

Table 4-81. Summary of Livestock Count Estimates in Clay, Jackson, and Macon Counties. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
County	(triousariu acres)	(tribusariu acres)	(million cubic reet)	(million board reet)	
Clay	105.1	105.1	2.3	10.1	
Jackson	135.9	135.9	0.9	5.1	
Macon					

Table 4-82. Forest Acreage and Annual Removal Rates (1987-1994) in Clay, Jackson, and Macon Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.35
Grass (Pastureland)	1.80
Grass (Hayland)	0.30
Legumes, Grass (Hayland)	0.31
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	1.76
Corn (Row Crops)	18.19
Tobacco (Row Crops)	18.95
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crops	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	1.16

Table 4-83. Annual Estimated Total Soil Loss in Subwatershed 051301060302.

# 4.2.C.iii. 051301060303 (Wartrace Creek).

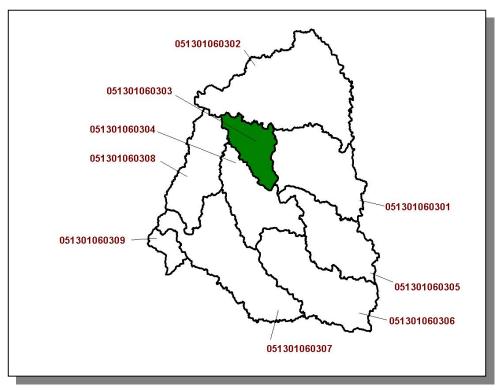


Figure 4-109. Location of Subwatershed 051301060303. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

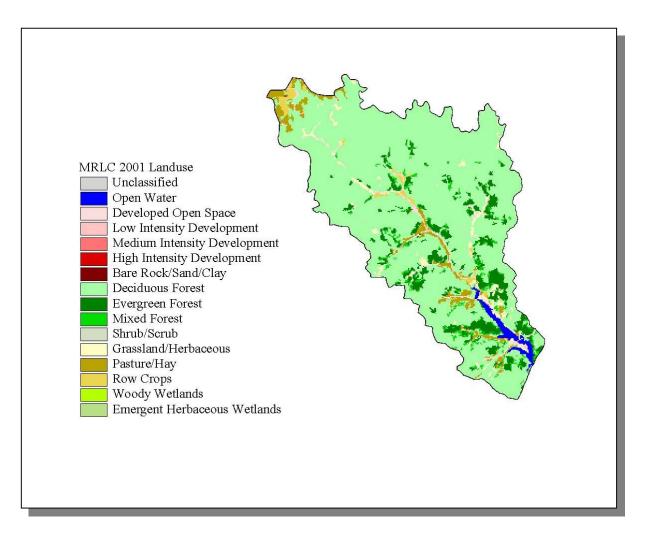


Figure 4-110. Illustration of Land Use Distribution in Subwatershed 051301060303.

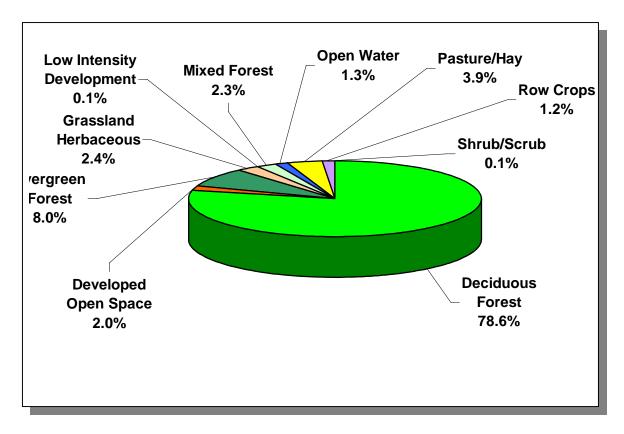


Figure 4-111. Land Use Distribution in Subwatershed 051301060303. More information is provided in Appendix IV.

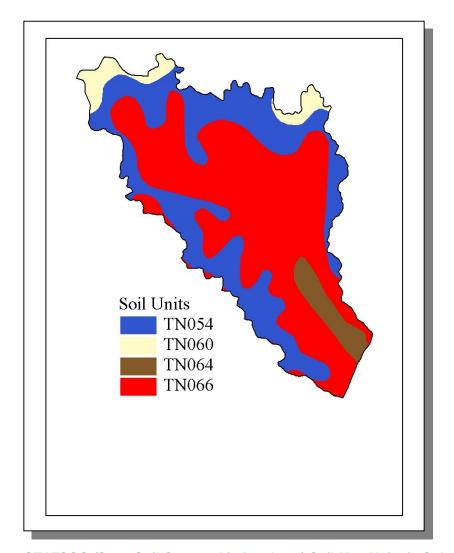


Figure 4-112. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060303.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-84. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060303. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
0	4000	4007	0000	Portion of	4000	4007	2000	% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Jackson	9,297	9,537	10,984	4.21	392	402	463	18.1
Macon	15,906	17,854	20,386	0.83	132	148	169	28.0
Smith	14,143	16,047	17,712	0.44	62	71	78	25.8
Total	39,346	43,438	49,082		586	621	710	21.2

Table 4-85. Population Estimates in Subwatershed 051301010303.

# 4.2.C.iii.a. Point Source Contributions.

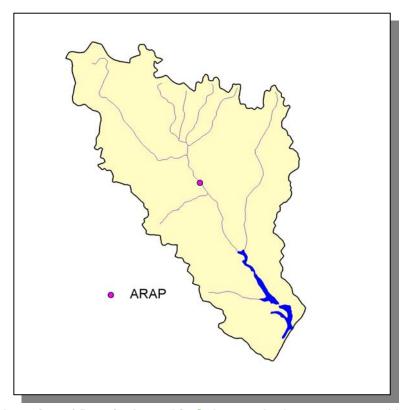


Figure 4-113. Location of Permits Issued in Subwatershed 051301060303. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-114. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301060303. More information is provided in Appendix IV.

#### 4.2.C.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep									
270	469	<5	<5	28	<5				

Table 4-86. Summary of Livestock Count Estimates in Subwatershed 051301060303. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS										
County Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Shee										
Jackson	6,962	12,086	10	727	403	39				
Macon	15,039	26,098	318	675	2,377	111				
Smith	17,187	29,672	814	683	1,883	332				

Table 4-87. Summary of Livestock Count Estimates in Jackson, Macon, and Smith Counties. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land	Timber Land	Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Jackson	135.9	135.9	0.9	5.1	
Macon					
Smith	81.0	81.0	1.1	2.6	

Table 4-88. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson, Macon, and Smith Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.35
Grass (Pastureland)	1.90
Grass (Hayland)	0.18
Legumes, Grass (Hayland)	0.13
Legumes (Hayland)	0.16
Grass, Forbs, Legumes (Mixed Pasture)	1.74
Corn (Row Crops)	18.56
Soybeans (Row Crops)	6.36
Tobacco (Row Crops)	9.68
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crops	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	1.07

Table 4-89. Annual Estimated Total Soil Loss in Subwatershed 051301060303.

#### 4.2.C.iv. 051301060304 (Cumberland River).

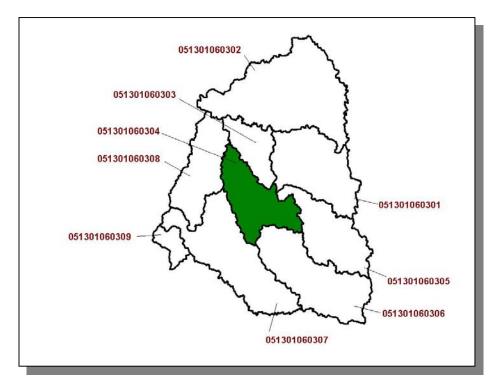


Figure 4-115. Location of Subwatershed 051301060304. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

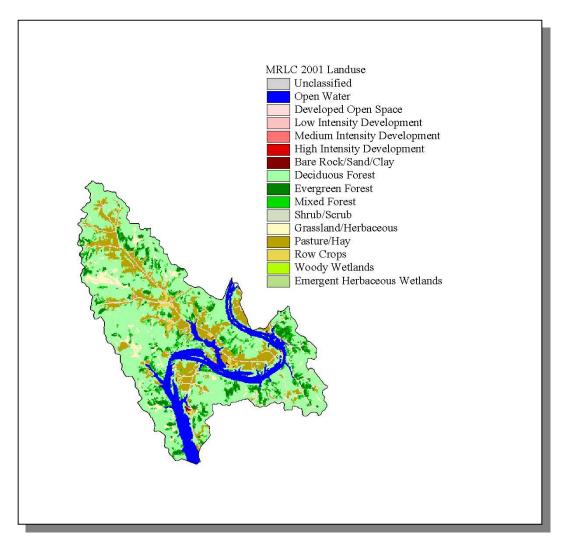


Figure 4-116. Illustration of Land Use Distribution in Subwatershed 051301060304.

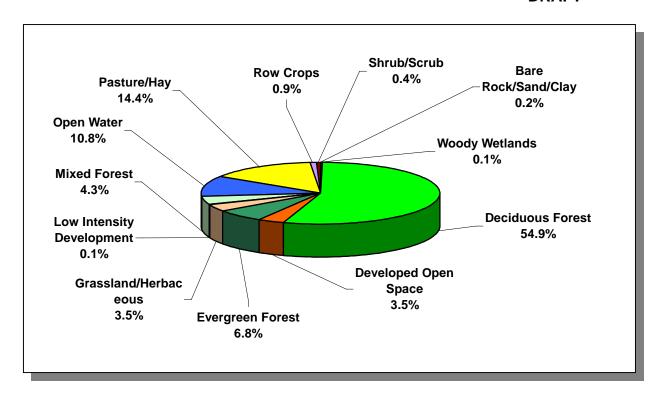


Figure 4-117. Land Use Distribution in Subwatershed 051301060304. More information is provided in Appendix IV.

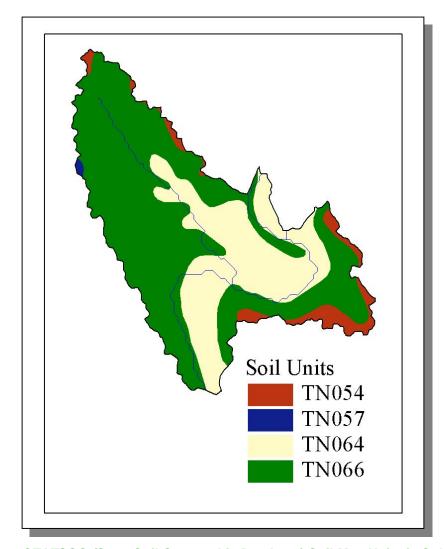


Figure 4-118. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060304.

STATSGO	PERCENT	HYDROLOGIC	PERMEABILITY	SOIL	ESTIMATED	SOIL
MAP UNIT ID	HYDRIC	GROUP	(in/hour)	рН	SOIL TEXTURE	ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN057	0.00	С	1.15	5.01	Clayey Loam	0.33
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-90. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060304. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION							
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Jackson	9,297	9,537	10,984	8.06	749	769	885	18.2
Smith	14,143	16,047	17,712	1.9	269	305	337	25.3
Total	23,440	25,584	28,696		1,018	1,074	1,222	20.0

Table 4-91. Population Estimates in Subwatershed 051301010304.

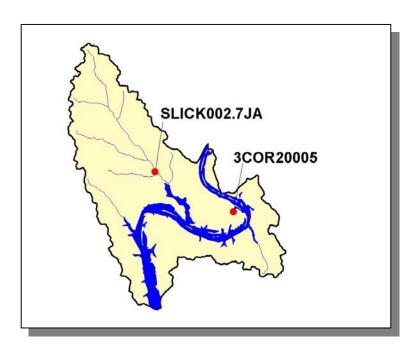


Figure 4-119. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060304. More information, including site names and locations, is provided in Appendix IV.

#### 4.2.C.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

# 4.2.C.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS									
Beef Cow	Beef Cow Cattle Milk Cow Chickens (Layers) Hogs Sheep								
1,269	2,198	24	<5	99	14				

**Table 4-92. Summary of Livestock Count Estimates in Subwatershed 051301060304.**According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Jackson	6,962	12,086	10	727	403	39			
Smith	17,187	29,672	814	683	1,883	332			

**Table 4-93. Summary of Livestock Count Estimates in Jackson and Smith Counties.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVA	AL RATE
	Forest Land Timber Land		Growing Stock	Sawtimber
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)
Jackson	135.9	135.9	0.9	5.1
Smith	81.0	81.0	1.1	2.6

Table 4-94. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson and Smith Counties.

CROPS	TONS/ACRE/YEAR		
Legumes (Pastureland)	0.41		
Grass (Pastureland)	2.09		
Grass (Hayland)	0.12		
Legumes, Grass (Hayland)	0.11		
Legumes (Hayland)	0.17		
Grass, Forbs, Legumes (Mixed Pasture)	1.74		
Corn (Row Crops)	21.43		
Soybeans (Row Crops)	6.36		
Tobacco (Row Crops)	6.96		
Farmsteads and Ranch Headquarters	1.15		

Table 4-95. Annual Estimated Total Soil Loss in Subwatershed 051301060304.

## 4.2.C.v. 051301060305 (Flynn Lake Creek).

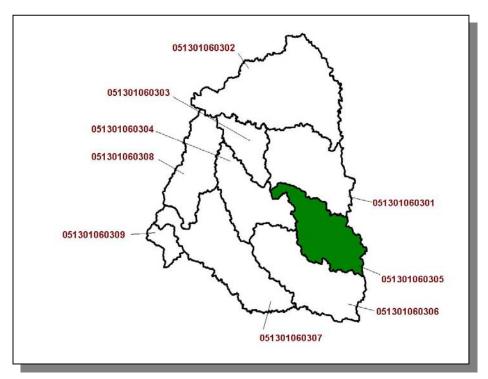


Figure 4-120. Location of Subwatershed 051301060305. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

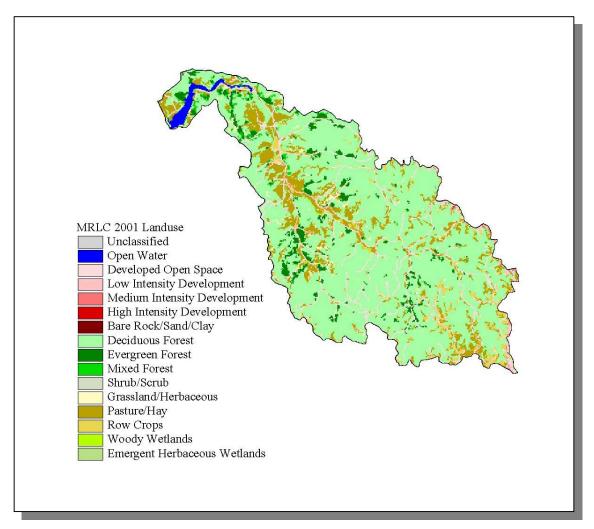


Figure 4-121. Illustration of Land Use Distribution in Subwatershed 051301060305.

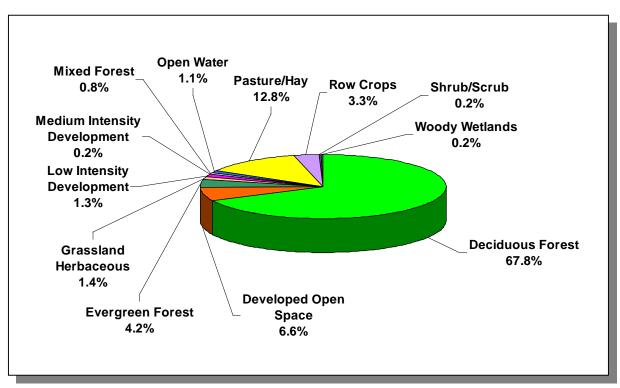


Figure 4-122. Land Use Distribution in Subwatershed 051301060305. More information is provided in Appendix IV.

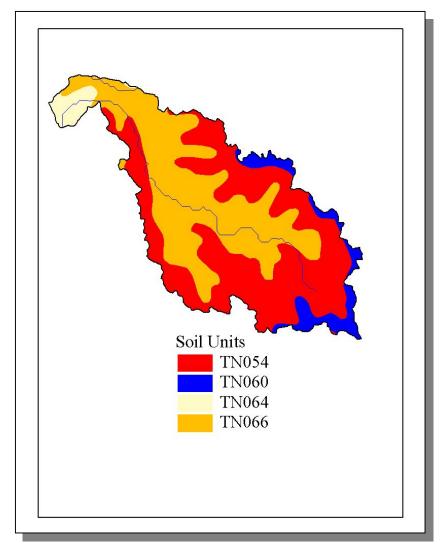


Figure 4-123. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060305.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-96. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060305. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION							
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Jackson	9,297	9,537	10,984	10.43	969	994	1,145	18.2

Table 4-97. Population Estimates in Subwatershed 051301010305.



Figure 4-124. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060305. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.v.a. Point Source Contributions.

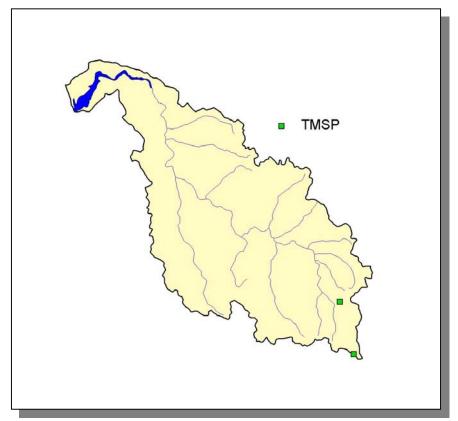


Figure 4-125. Location of Permits Issued in Subwatershed 051301060305. More information, including the names of facilities, is provided in Appendix IV.

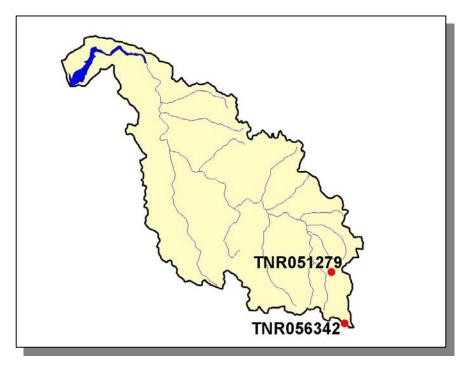


Figure 4-126. Location of TMSP Sites in Subwatershed 051301060305. More information, including the names of facilities, is provided in Appendix IV.

### 4.2.C.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
573	995	<5	<5	33	<5			

**Table 4-98. Summary of Livestock Count Estimates in Subwatershed 051301060305.**According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS								
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep		
Jackson	6,962	12,086	10	727	403	39		

**Table 4-99. Summary of Livestock Count Estimates in Jackson County.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVA	AL RATE
	Forest Land	Timber Land	Growing Stock	Sawtimber
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)
Jackson	135.9	135.9	0.9	5.1

Table 4-100. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson County.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	2.24
Legumes (Hayland)	0.17
Grass, Forbs, Legumes (Mixed Pasture)	1.99
Corn (Row Crops)	21.43
Farmsteads and Ranch Headquarters	1.31

Table 4-101. Annual Estimated Total Soil Loss in Subwatershed 051301060305.

# 4.2.C.vi. 051301060306 (Martin Creek).

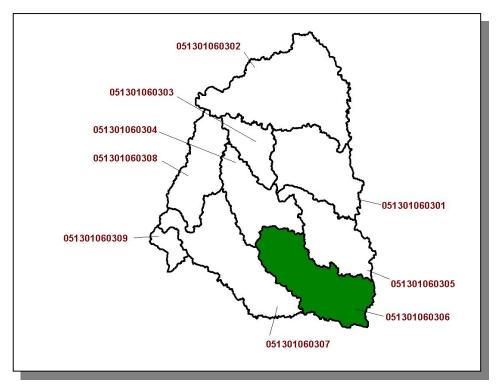


Figure 4-127. Location of Subwatershed 051301060306. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

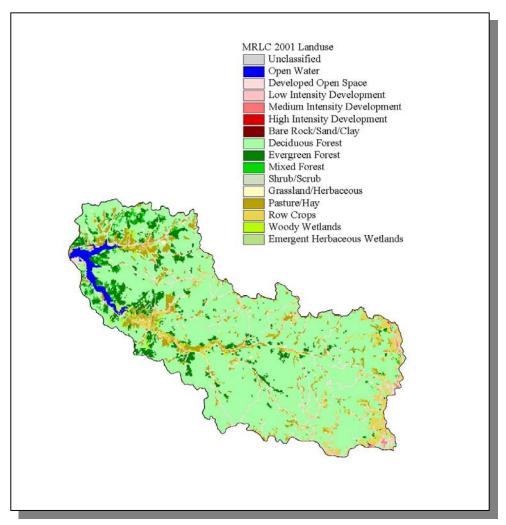
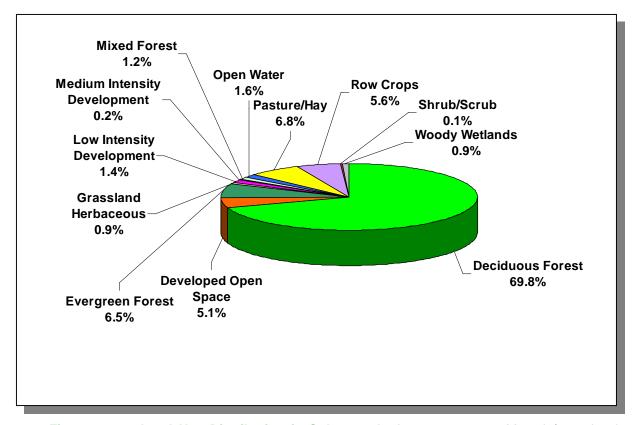


Figure 4-128. Illustration of Land Use Distribution in Subwatershed 051301060306.



**Figure 4-129. Land Use Distribution in Subwatershed 051301060306.** More information is provided in Appendix IV.

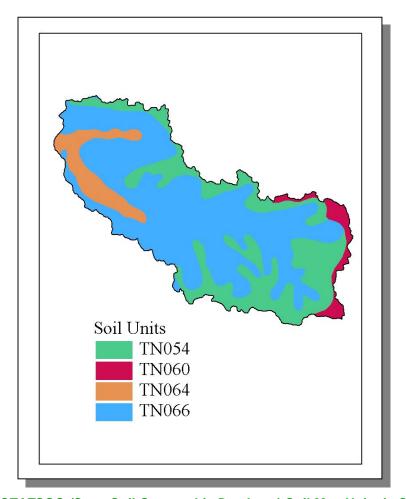


Figure 4-130. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060306.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-102. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060306. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION				IATED PC N WATER	PULATION SHED		
				Portion of				% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Jackson	9,297	9,537	10,984	6.24	580	595	686	18.3
Putnam	51,373	58,326	62,315	6.73	3,458	3,926	4,194	21.3
Total	60,670	71,852	73,299		4,038	4,521	4,880	20.9

Table 4-103. Population Estimates in Subwatershed 051301010306.

				NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Baxter	Putnam	1,289	579	424	153	2

Table 4-104. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301060306.

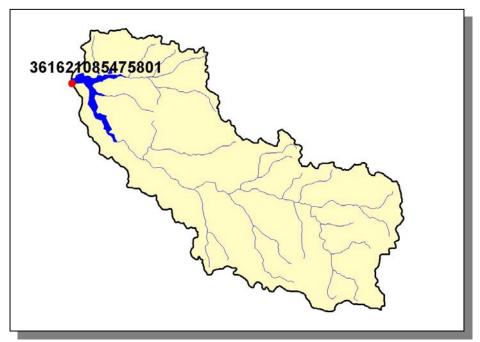


Figure 4-131. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301060306. More information is provided in Appendix IV.



Figure 4-132. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060306. More information, including site names and locations, is provided in Appendix IV.

#### 4.2.C.vi.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

#### 4.2.C.vi.b. Nonpoint Source Contributions.

	LIVESTOCK COUNTS									
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep					
667	1,247	33	<5	49	<5					

**Table 4-105. Summary of Livestock Count Estimates in Subwatershed 051301060306.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Jackson	6,962	12,086	10	727	403	39			
Putnam	12,592	24,817	1,095	1,025	1,070	66			
Smith	17,187	29,672	814	683	1,883	332			

**Table 4-106. Summary of Livestock Count Estimates in Jackson, Putnam, and Smith Counties.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	NTORY	REMOVAL RATE		
	Forest Land	Forest Land Timber Land		Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Jackson	135.9	135.9	0.9	5.1	
Putnam	152.5	152.3	3.6	16.4	
Smith	81.0	81.0	1.1	2.6	

Table 4-107. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson, Putnam, and Smith Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	2.04
Grass (Hayland)	1.63
Legumes (Hayland)	0.20
Legumes, Grass (Hayland)	0.61
Grass, Forbs, Legumes (Mixed Pasture)	1.40
Corn (Row Crops)	21.43
Soybeans (Row Crops)	6.36
Tobacco (Row Crops)	12.37
Other Vegetable and Truck Crops	14.60
Farmsteads and Ranch Headquarters	0.68

Table 4-108. Annual Estimated Total Soil Loss in Subwatershed 051301060306.

# 4.2.C.vii. 051301060307 (Cumberland River).

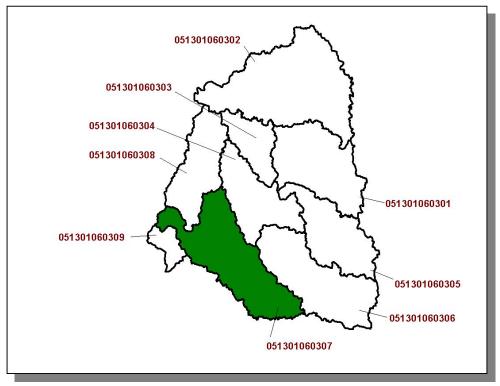


Figure 4-133. Location of Subwatershed 051301060307. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

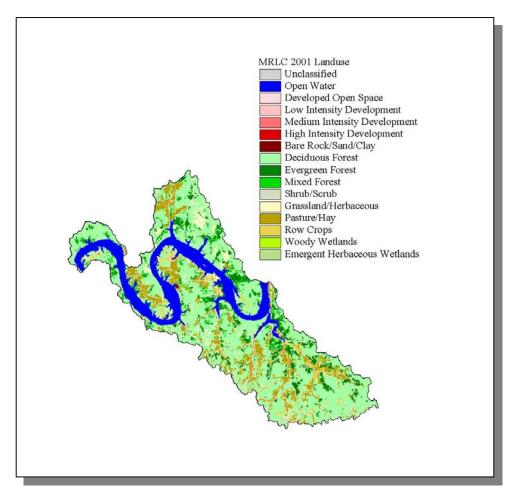


Figure 4-134. Illustration of Land Use Distribution in Subwatershed 051301060307.

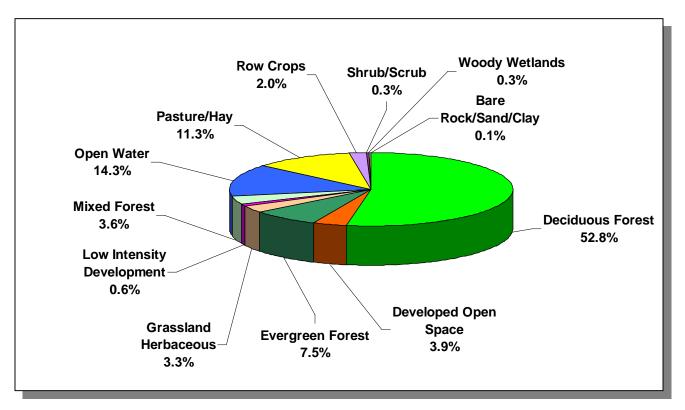


Figure 4-135. Land Use Distribution in Subwatershed 051301060307. More information is provided in Appendix IV.

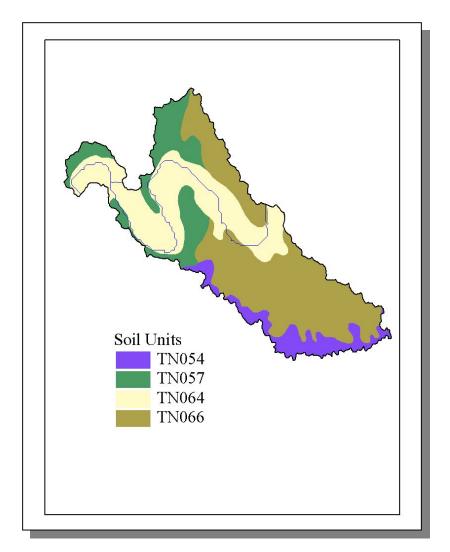


Figure 4-136. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060307.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN057	0.00	С	1.14	5.01	Clayey Loam	0.33
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-109. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060307. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
Country	1000	1007	2000	Portion of	1000	1007	2000	% Change
County	1990	1997	2000	Watershed (%)	1990	1997	2000	(1990-2000)
Jackson	9,297	9,537	10,984	1.76	163	167	193	18.4
Putnam	51,373	58,326	62,315	2.81	1,443	1,638	1,750	21.3
Smith	14,143	16,947	17,712	11.79	1,668	1,892	2,089	25.2
Total	74,813	83,910	91,011		3,274	3,697	4,932	23.2

Table 4-110. Population Estimates in Subwatershed 051301010307.

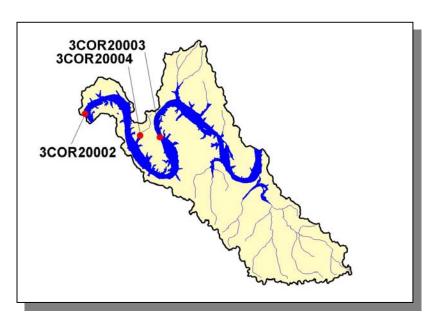


Figure 4-137. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060307. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.vii.a. Point Source Contributions.

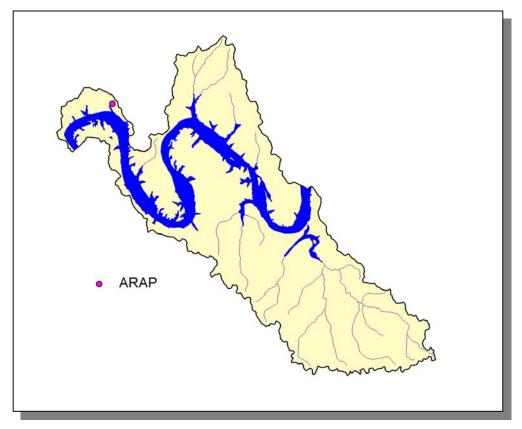


Figure 4-138. Location of Permits Issued in Subwatershed 051301060307. More information, including the names of facilities, is provided in Appendix IV.

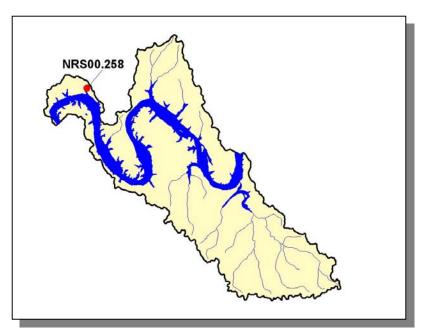


Figure 4-139. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 051301060307. More information is provided in Appendix IV.

# 4.2.C.vii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
1,894	3.326	97	4	199	33			

Table 4-111. Summary of Livestock Count Estimates in Subwatershed 051301060307. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS									
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
Jackson	6,962	12,086	10	727	403	39			
Putnam	12,592	24,817	1,095	1,025	1,070	66			
Smith	17,187	29,672	814	683	1,883	332			

Table 4-112. Summary of Livestock Count Estimates in Jackson, Putnam, and Smith Counties. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land	Forest Land Timber Land		Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Jackson	135.9	135.9	0.9	5.1	
Putnam	152.5	152.3	3.6	16.4	
Smith	81.0	81.0	1.1	2.6	

Table 4-113. Forest Acreage and Annual Removal Rates (1987-1994) in Jackson, Putnam, and Smith Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	1.64
Grass (Hayland)	0.47
Legumes, Grass (Hayland)	0.22
Legukes (Hayland)	0.21
Grass, Forbs, Legumes (Mixed Pasture)	0.86
Corn (Row Crops)	21.43
Soybeans (Row Crops)	6.36
Tobacco (Row Crops)	8.22
Other Vegetable and Truck Crops	14.60
Farmsteads and Ranch Headquarters	0.49

Table 4-114. Annual Estimated Total Soil Loss in Subwatershed 051301060307.

# 4.2.C.viii. 051301060308 (Defeated Creek).

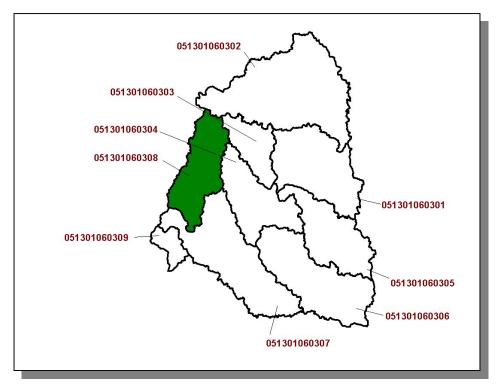


Figure 4-140. Location of Subwatershed 051301060308. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

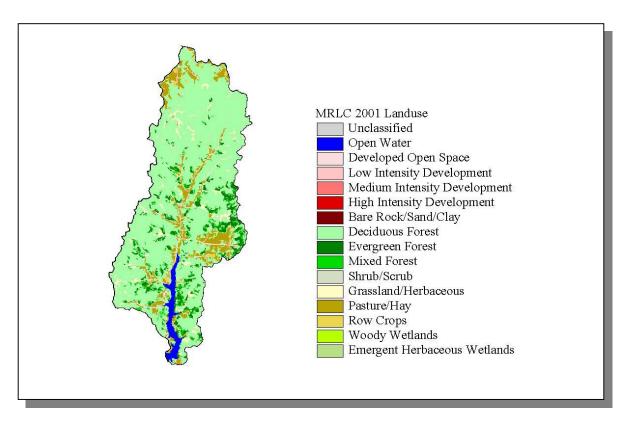


Figure 4-141. Illustration of Land Use Distribution in Subwatershed 051301060308.

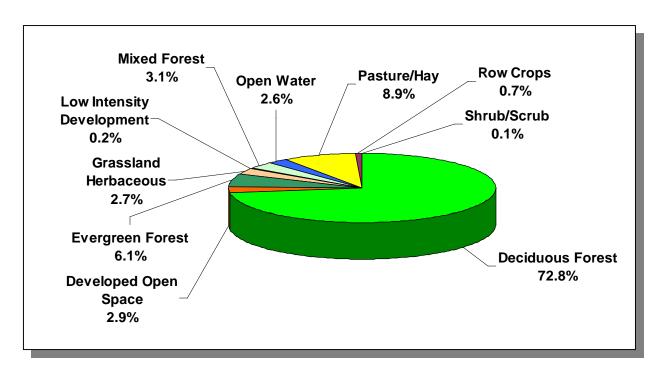


Figure 4-142. Land Use Distribution in Subwatershed 051301060308. More information is provided in Appendix IV.

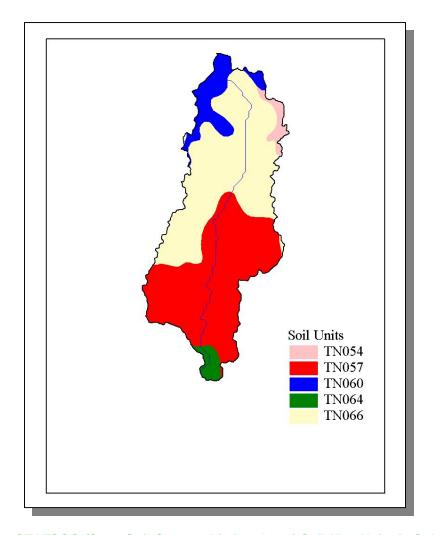


Figure 4-143. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060308.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	С	3.04	4.84	Loam	0.32
TN057	0.00	С	1.14	5.01	Clayey Loam	0.33
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN064	7.00	С	1.19	5.82	Silty Loam	0.37
TN066	0.00	В	2.62	4.75	Loam	0.28

Table 4-115. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060308. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Macon	15,906	17,854	20,386	1.12	178	199	228	28.1
Smith	14,143	16,047	17,712	8.59	1,215	1,378	1,522	25.3
Total	30,049	33,901	38,098		1,393	1,577	1,750	25.6

Table 4-116. Population Estimates in Subwatershed 051301010308.

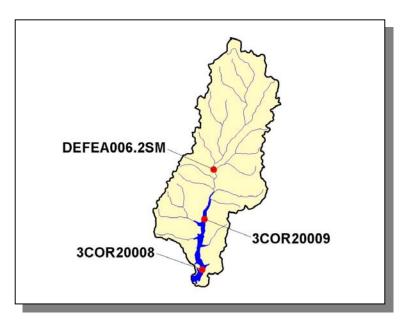


Figure 4-144. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060308. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.viii.a. Point Source Contributions.

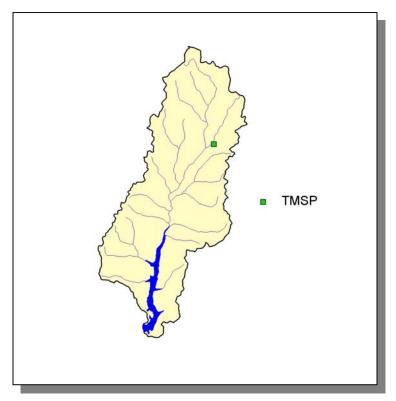


Figure 4-145. Location of Permits Issued in Subwatershed 051301060308. More information, including the names of facilities, is provided in Appendix IV.

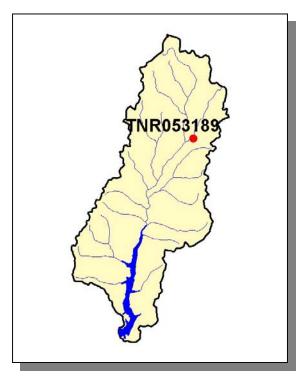


Figure 4-146. Location of TMSP Sites in Subwatershed 051301060308. More information, including the names of facilities, is provided in Appendix IV.

## 4.2.C.viii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
1,403	2,423	61	3	163	25			

Table 4-117. Summary of Livestock Count Estimates in Subwatershed 051301060308. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS								
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep		
Macon	15,039	26,098	318	675	2,377	111		
Smith	17,187	29,672	814	683	1,883	332		

Table 4-118. Summary of Livestock Count Estimates in Macon and Smith Counties. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
	Forest Land Timber Land		Growing Stock	Sawtimber	
County	(thousand acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Macon					
Smith	81.0	81.0	1.1	2.6	

Table 4-119. Forest Acreage and Annual Removal Rates (1987-1994) in Macon and Smith Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.07
Grass (Pastureland)	1.35
Grass (Hayland)	0.13
Legumes, Grass (Hayland)	0.11
Legumes (Hayland)	0.13
Grass, Forbs, Legumes (Mixed Pasture)	0.70
Corn (Row Crops)	3.99
Soybeans (Row Crops)	6.36
Tobacco (Row Crops)	7.44
Wheat (Close-Grown Cropland)	3.43
Other Vegetable and Truck Crops	5.48
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.42

Table 4-120, Annual Estimated Total Soil Loss in Subwatershed 051301060308.

# 4.2.C.ix. 051301060309 (Cumberland River).

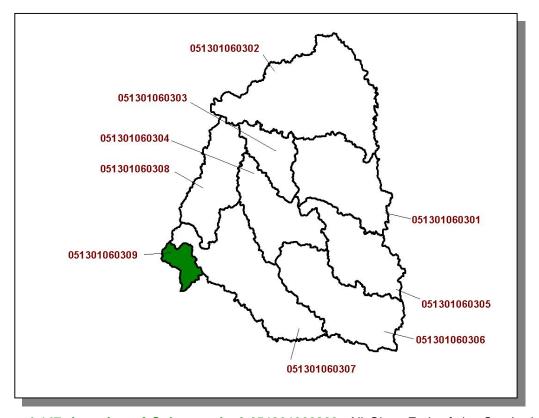


Figure 4-147. Location of Subwatershed 051301060309. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

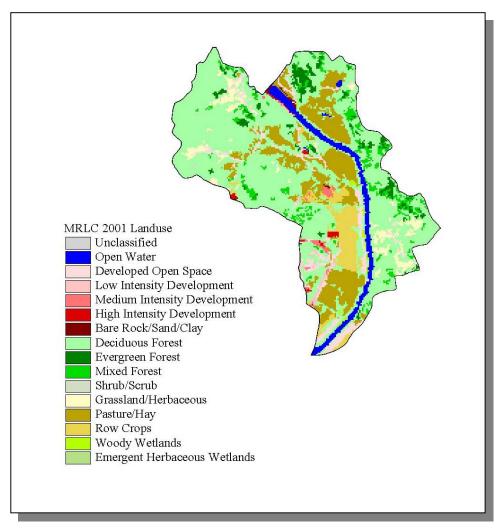


Figure 4-148. Illustration of Land Use Distribution in Subwatershed 051301060309.

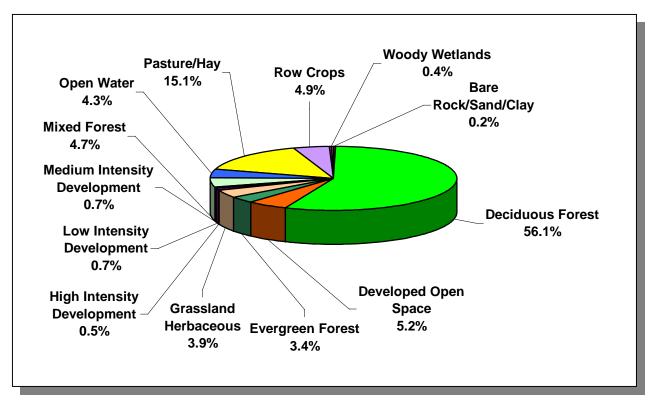


Figure 4-149. Land Use Distribution in Subwatershed 051301060309. More information is provided in Appendix IV.

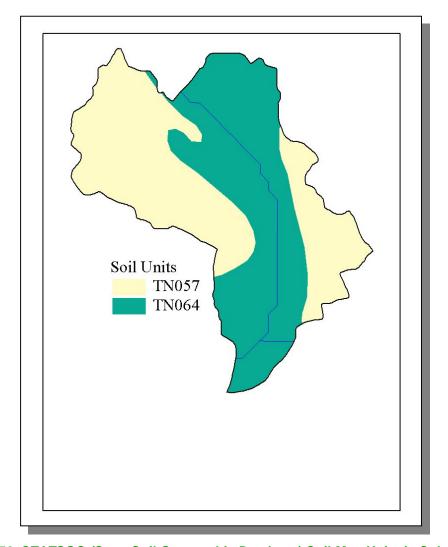


Figure 4-150. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060309.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN057	0.00	С	1.14	5.01	Clayey Loam	0.33
TN064	7.00	С	1.19	5.82	Silty Loam	0.37

Table 4-121. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060309. The definition of "Hydrologic Group" is provided in Appendix IV.

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	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED				
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-2000)
Smith	14,143	16,047	17,712	2.19	309	351	387	25.2

Table 4-122. Population Estimates in Subwatershed 051301060309.

				NUMBER OF HO	USING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Carthage	Smith	2,386	1,080	1,054	23	3

Table 4-123. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301060309.

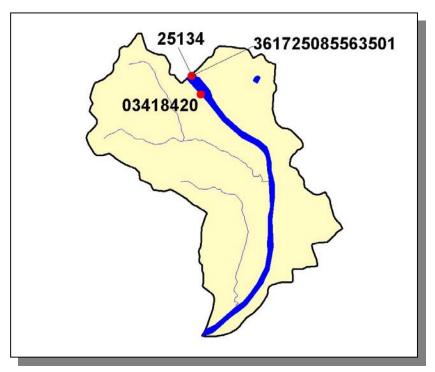


Figure 4-151. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301060309. More information is provided in Appendix IV.

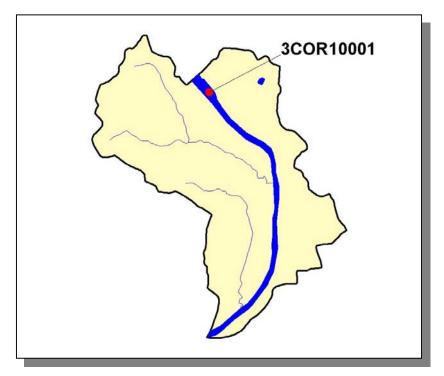


Figure 4-152. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060309. More information, including site names and locations, is provided in Appendix IV.

# 4.2.C.ix.a. Point Source Contributions.

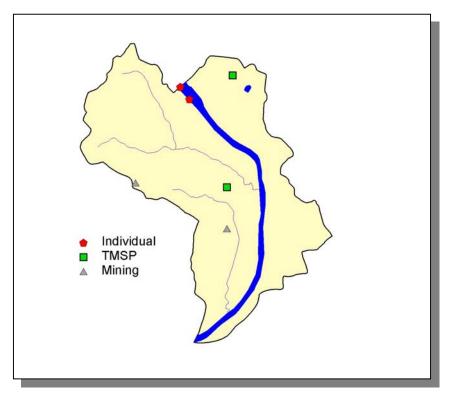


Figure 4-153. Location of Permits Issued in Subwatershed 051301060309. More information, including the names of facilities, is provided in Appendix IV.

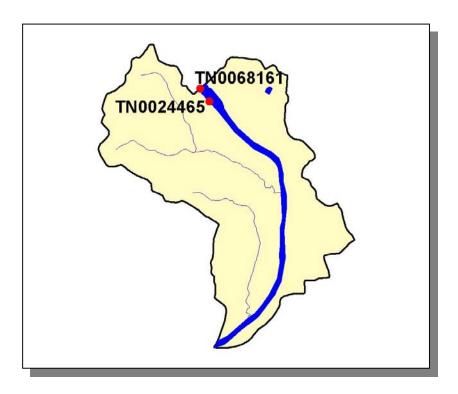


Figure 4-154. Location of Active NPDES Sites in Subwatershed 051301060309. More information, including the names of facilities, is provided in Appendix IV.

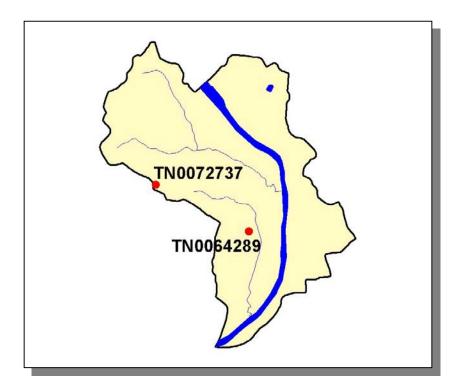


Figure 4-155. Location of Active Mining Sites in Subwatershed 051301060309. More information, including the names of mining operations, is provided in Appendix IV.



Figure 4-156. Location of TMSP Sites in Subwatershed 051301060309. More information, including the names of facilities, is provided in Appendix IV.

### 4.2.C.ix.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS								
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep			
618	1,068	814	<5	68	12			

Table 4-124. Summary of Livestock Count Estimates in Subwatershed 051301060309. According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS							
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep	
				_			
Smith	17,187	29,672	814	683	1,883	332	

**Table 4-125. Summary of Livestock Count Estimates in Smith County.** According to the 1997 Census of Agriculture (<a href="http://www.nass.usda.gov/census/">http://www.nass.usda.gov/census/</a>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVEN	ITORY	REMOVAL RATE		
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)	
Smith	81.0	81.0	1.1	2.6	

Table 4-126. Forest Acreage and Annual Removal Rates (1987-1994) in Smith County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.47
Grass (Hayland)	0.12
Legumes, Grass (Hayland)	0.11
Grass, Forbs, Legumes (Mixed Pasture)	0.66
Soybeans (Row Crops)	6.36
Tobacco (Row Crops)	6.96
Farmsteads and Ranch Headquarters	0.45

Table 4-127. Annual Estimated Total Soil Loss in Subwatershed 051301060309.